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1934/35

Illinois University

Catalogue of motion picture films

UNIVERSITY OF ILLINOIS BULLETIN
Vol. XXXII October 23, 1934 No. 8

Catalogue of Motion Picture Films and Glass Slides

1934-1935

OCT 4 193

University of Illinois
Visual Aids Service
113 Education Building
Urbana

Published weekly by the University of Illinois. Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois, under the Act of August 24, 1912. Acceptance for mailing at the special rate of postage provided for in section 1103, Act of October 3, 1917, authorized July 31, 1918.

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Visual Aids Service

The Plan for a Cooperative 16mm Film Library

A year ago a plan was suggested for building a central library of 16mm classroom films for the use of cooperating Illinois schools. According to the plan a school purchases and deposits a 16mm classroom film in the Visual Aids Library and pays a service fee of $5 per year. This entitles the school to unlimited use of the 16mm films and glass slides during the year. Inasmuch as the average life of a film which is booked once a week is approximately two years, schools are asked to deposit a classroom film every two years. Excellent classroom films may be purchased for as little as $24 per reel, and therefore the total yearly cost to a school is approximately $17 a year. With the issuance of this catalogue, the beginning of the second year of the plan, there are available to member schools more than 150 reels of 16mm film. Among these are more than thirty reels which cannot be rented from a bureau of visual instruction for less than one dollar per day.

It is expected that additional classroom films will be deposited during the year. Member schools will be advised concerning new films from time to time. School administrators or teachers wishing to deposit a film for their school should write the Visual Aids Service for instructions on selecting a film so as not to duplicate those in the library.

The 16mm film is rapidly replacing the 35mm film for school use for the following reasons: (1) The equipment and film are easier to handle. Any teacher can learn to operate a 16mm projector in ten minutes. (2) All 16mm films are on safety stock, thus avoiding all danger of fire. No booth is required for projecting 16mm films. (3) The purchase and rental prices of 16mm films are much less than for 35mm films. (4) A 16mm film costs much less for transportation than a 35mm film. (5) The picture obtained from a 16mm film is regarded adequate for all practical purposes, including small auditorium use.

Fees

1. Schools depositing a classroom film and paying a service fee of $5 are entitled to unlimited use of 16mm films and glass slides. (See above.)
2. An annual service fee of $7.50 entitles a school to unlimited use of the 16mm films *not* marked by an asterisk and of the glass slides. A fee of $4.50 entitles a school to such service for one semester.
3. An annual service fee of $7.50 entitles a school to unlimited use of all 35mm films and of the glass slides. A fee of $4.50 entitles a school to such service for one semester.
4. An annual service fee of $4 entitles a school to unlimited use of the glass slides. A fee of $2.50 entitles a school to such service for one semester.
5. If the use of both sizes of film is desired, $2.50 should be added to the yearly service fee or $1.50 to the semester fee, as the case may be.
6. Single film titles or slide sets may be rented for a fee of fifty cents each. The fee must accompany the order.

Rules Governing the Visual Aids Service

1. *Transportation charges both ways will be paid by the user.* In the case of 16mm films especially transportation is much cheaper by parcel post than express. Materials may be sent from this Service by parcel post if the borrower has a postage deposit; otherwise all materials will be sent express collect. If it is desired that materials be sent by parcel post, a deposit varying from $2 to $5 should be made depending upon the amount of material used. All parcel post shipments should be insured.

2. Films are booked for *one* day's use. Slides are booked for *three* day's use. Return shipments must be sent not later than the *morning* following the date of booking or the next borrower may be seriously inconvenienced.

3. The Service reserves the right to wire a user collect who holds a film more than one day or slides more than three days without permission.

4. The user is liable for any undue damage to materials. The cost of replacing damaged films averages about six cents a foot, and broken slides about fifty cents each.

5. Monthly reports concerning the circulation of materials are required of this Service. Therefore the user is required to fill out and return each time the Borrower's Report Card supplied. This card may be returned in express packages if desired.

6. Borrowers are not permitted to loan materials to other individuals or institutions nor to use them for personal financial gain.

7. *Do not rewind films.* Do not try to mend or pin films; use wire clips instead.

8. Address all packages and correspondence to *Visual Aids Service, 113 Education Building, University of Illinois, Urbana, Illinois.*

Suggestions Relative to Ordering

1. Suggest more than one date for the booking of films or slides. This may save considerable correspondence.

2. If possible make a first and second choice of subjects.

3. State accurately the title of the film or set of slides.

4. Be sure to *state size of film wanted.* The 16mm films are the narrow films and the 35mm films are the regular or wide size.

Suggestions on the Operation of Projectors

1. Confine the oil to the places to be lubricated. A large proportion of the troubles of the average projector is due to careless use of lubricants. Keep rollers that guide the film lubricated with light oil, but do not get the oil on the outside of the rollers.

2. *The film gate must be kept clean.* Clean the tracks often; for if a particle of emulsion sticks to the tracks, it will gradually pick up more emulsion and make scratches on the film.

3. Do not use sandpaper or any metal object to remove emulsion. They will only roughen up the runners so as to make them worse at tearing off emulsion. Use the finger nail to remove emulsion from machine parts.

4. If the sprockets are worn sharp, replace them immediately. They are

dangerous to films and cause an unsteady picture. It is much cheaper to replace worn sprockets than to buy new films.

5. Do not use a projector until it is in *good condition.* It does not pay.

Additional Films on the Subject of Health

Illinois schools may obtain additional films on health, hygiene, nutrition, sanitation, and disease from the State Department of Public Health. A 16mm projector may also be borrowed for showing the films. Teachers interested should write to Mr. B. K. Richardson, Chief, Division of Public Instruction, Department of Public Health, Springfield, Illinois.

Visual Instruction Equipment

The Visual Aids Service will gladly give information in regard to visual instruction equipment to those who desire it.

The cost of providing adequate motion picture equipment, films, and slides for a school is a relatively small item, and a legitimate one. It should be provided for in the regular budget. Teaching with the aid of motion pictures and slides is both an economical and efficient form of instruction.

> *Note:* Address all packages and correspondence to Visual Aids Service, 113 Education Building, University of Illinois, Urbana, Illinois.

Alphabetical List of 16mm Films

See page 3 for regulations governing the 16mm film service.

Films marked with an asterisk are available *only* to schools which have deposited a classroom film in the Visual Aids Service Library.

All 16mm films are on safety (non-inflammable) stock. The film subjects are one reel in length unless otherwise indicated.

***Animal Life, Microscopic.**

Photomicrographic views show four single-celled animals: amoeba, paramecium (slipper-shaped protozoan), stentor (trumpet-shaped protozoan), vorticella (bell-shaped protozoan); and one remarkable multi-celled animal, the rotifer ("wheel" animalcule). Teacher's guide. Eastman classroom film, deposited by Haw Creek Township High School.

***Animals.**

Leopards, tigers, lions, gorillas, deer, chimpanzees, frogs and anteaters are shown. Shows development of tadpole into frog, and deer shedding their antlers.

Annapolis, Apples of.

A film tour of the famous Annapolis Valley, Nova Scotia, an extensive apple growing region, in blossom time and during harvest. Illustrates various phases of the apple industry. Many pictorially beautiful scenes.

***Ants.** (½ reel)

A film depicting interesting facts about ants. Shows eggs, larva, pupa; and adult ants at work.

***Argentina.**

Portrays this South American republic as essentially agricultural and pastoral. Covers Patagonia, a region of sheep grazing; the arid uplands, which produce heavy crops of sugar cane and grapes with the aid of irrigation; the pampas, a flat expanse of loess combining natural grazing grounds in the heart of Argentina with rich agricultural areas near the seaboard. The Transandean Railroad, the port cities of Bahia Blanca and Buenos Aires, and the Victoria Falls of the Iguassu are shown. Teacher's guide. Eastman classroom film, deposited by Urbana High School.

***Atmosphere in Relation to Animal Life, Components of the.**

This film depicts experiments which studied the effects of varying the percentages of oxygen, hydrogen, carbon dioxide, helium and argon in the air breathed by guinea pigs, fish, rats, dogs, pigeons, cats and mice.

***Automobile, The.**

By tracing production and use of iron, rubber, glass and gasoline in the automobile, the film presents a striking picture of the interdependence of industries. Teacher's guide. Eastman classroom film, deposited by Mattoon High School.

Banana Land.

This films depicts the cultivation of bananas in Central America and the West Indies, and the preparation of the crops for shipment. It is adapted to use in geography classes, as it shows scenes of native life.

Behind the Cup. (2 reels)

This film depicts the complete story of coffee from tree to cup: planting the seeds; growing the trees; picking the berries; blending, roasting; grinding and packing.

Birds of Bonaventure.

Glimpses of the famous Canadian bird sanctuary at Bonaventure Island in the Gulf of St. Lawrence and the various types of Canadian sea-fowl that nest in countless thousands on the cliffs of the picturesque home of birds.

Blindness and Saving Sight, Preventing. (2 reels)

Vision defects and their correction; eye diseases, notably trachoma, and their prevention; rules for eye health through proper illumination, eye care, and preventive measures in childhood and old age; and industrial eye protection. Popular treatment, suitable for lay audiences and for schools, as well as for medical social audiences.

Books—From Manuscript to Classroom.

This film holds consistently to the purpose for which it was made, as indicated in the title. The manuscript, type-

setting, raw paper stock, huge presses, folding, gathering, binding, trimming, covering, shaping, packing, and shipping. An interesting educational film.

Bronze-Back, In Quest of the.

The Bronze-back is probably the sportiest and most fighting species of bass, and this film depicts the experiences of a party of anglers on a fishing expedition where these finny warriors are found in great numbers.

Cane Sugar. (2 reels)

This film shows primitive methods of producing cane sugar and the history of cane sugar from ancient times. The cane sugar regions of the world in pictures and animated maps. The process of raising the cane in Cuba from planting to the harvest. Manufacture of raw sugar in Cuba. Refining sugar in New York. Packing of finished product. Graphic animation of the extensive use of sugar in U. S. Produced by Pathe in cooperation with Harvard University.

Canoe Trails Through Mooseland.

A scenic and nature film depicting a canoe trip through the wilds of northeastern Canada and containing glimpses of picturesque woodland and waterways as well as many exceptional close-up "action" views of moose, deer, bear, beaver, and other wild life on land and water.

*Cell, The Living.

Pictures the division and growth of single-celled organisms: yeast, amoeba, paramecium — many celled organisms: hydra and flatworm—tissue cells. Teacher's guide. Eastman classroom film, deposited by Yorkville Consolidated Schools.

Cement Sack, From Mountain to.

This film pictures the most important of 80 processes involved in cement manufacture, as explained to a pupil by a manikin who steps from an encyclopedia which the pupil has been studying. Views of quarrying, loading, crushing, grinding, etc. All processes up to the filled sack are pictured.

Chamber of Commerce, The Junior.

A junior chamber of commerce helped to clean up the city.

*Cheese, Swiss.

The various steps in the making of Swiss cheese are shown in this film.

*Circulation.

Animations and photography trace the human circulatory system; compare the human heart with that of a frog; and show the cycle of pulmonary circulation. Teacher's guide. Eastman classroom film, deposited by the University of Illinois High School.

City by the Sea, The.

A travelogue of historic Halifax, the capital of Nova Scotia, a city of much interest and charm.

Cold, The Common.

This film pictures the dangers of the common cold and shows how to prevent and care for it.

Construction that Endures.

This film demonstrates various ways in which concrete is employed in construction, including Panama canal, bridges, highways, railroad beds, farm buildings, irrigation pipes, walls, tennis courts, swimming pools, stadia, airports, fountains, and statuary. Animated graphs show correct proportions of cement, stone, sand, and water.

Cotton: From Seed to Cloth. (2 reels)

Shows cotton growing regions of the world. The cotton growing in the Southern states, ginning, transportation to New England, manufacture into cloth and blankets, animations and color photography show for the first time, the details of spinning and weaving of cotton textiles and blankets. Produced by Pathe in cooperation with Harvard University.

*Cotton Growing.

Shows various steps in preparing the ground; stages in the growth of cotton plants; methods of fighting the boll-weevil; harvesting, ginning, bagging, and transporting cotton. Teacher's guide. Eastman classroom film, deposited by Kewanee High School.

Diagnostic Laboratories, Activities of.

This film depicts the activities which are carried on in the laboratory of the Illinois State Department of Public Health. Examining dog's head for rabies; making tests for diseases; collecting blood serum for convalescents for use in the treatment of infantile paralysis. Shows importance of laboratories in the control of disease.

Digging Up the Past.

A unique and instructive film showing the Badlands of the Red Deer Valley, Alberta, Canada, the most prolific field in the world for paleontological research, and how dinosaurs are located and secured. The film also depicts the work of assembling the fossilized bones of prehistoric monsters at the Royal Victoria Museum, Ottawa, Canada.

Diphtheria, Outwitting.

This is a health film showing ways of preventing diphtheria. The efficacy of antitoxin in fighting diphtheria.

Drinking Health. (2 reels)

Shows how nature provides for quenching our thirst, the great government enterprises established to supply us with pure drinking water and the needs and uses of drinking water by the body. Dangers of contamination from unclean drinking vessels are shown with suggestions of medical authority as how to avoid them. Vividly illustrated by action scenes and microscopic photography. Produced by Pathe in cooperation with Harvard University.

Edison, Thomas A.

Two-score years after Edison invented the incandescent lamp, he was the guest of honor at the laboratories of the General Electric Company in Schenectady. This picture gives intimate glimpses of the famous inventor as he inspected the methods employed in the development of his greatest contribution to modern life.

*Electricity, Magnetic Effects of.

Includes magnetism and magnetic induction with their applications to the electromagnet, the electric bell, the ammeter, the voltmeter, and the motor; the theory of permanent magnetism; an explanation of terrestrial magnetism. Teacher's guide. Eastman classroom film, deposited by East Aurora High School.

*Embryo, The Development of a Bird.

An elementary treatment, by means of photomicrography and diagram, using the chick for early stages, the wren for the last stage and hatching. Technique of mounting the embryo for observation, establishment of circulation, action of the heart, and development of three membranes—yolk sac, amnion, and allantois. Teacher's guide. Eastman classroom film, deposited by West Chicago Community High School.

Emile Lost his Temper, When.

A lesson in school citizenship for grade school pupils.

*Energy from Sunlight.

Explains the principle of a solar engine; pictures the energy of falling water, sunlight, and wind power; shows how energy from sunlight stimulates plant growth, and is stored for future use in the form of wood and coal. Teacher's guide. Eastman classroom film, deposited by Ottawa Township High School.

Evangeline, The Land of.

A scenic travelogue of the historic Minas region of Nova Scotia immortalized in Longfellow's famous poem "Evangeline." The film contains interesting views of the scenery of this old Acadian land as well as glimpses of Evangeline's Well, Grand Pre, the old dykes, mighty Blomidon and other famous land marks.

*Feet, The.

Shows details of structure and arrangement of arches; the best mechanical use of the foot; the points of a good shoe, and harmful effect of improper shoes; good feet as an asset. Eastman classroom film.

Feet, The.

This film shows the structure of the feet, the function of the arches, and the need for properly fitted shoes.

*Flower to Fruit, From.

Shows how all parts of a flower help in producing seeds. The flowers of roses, lilies and apples mature, anthers produce pollens, insects assist in pollination, pollen tubes grow, fertilization is completed, and the fruit develops. Time-lapse motion photomicrography and animated diagrams are freely used. Teacher's guide. Eastman classroom film.

*Fly, The House.

A life history, depicting larva, pupa, and adult. The structure of the house fly, which helps to make it a health menace, is shown in motion photomicro-

graphs. The dangerous habits, rapidity of breeding, and methods of control of this common insect are convincingly shown. Teacher's guide. Eastman classroom film, deposited by East Aurora High School.

Food and Growth.

A feeding experiment with white rats, actually carried on in a classroom, demonstrates the food value of milk as compared with coffee and candy. The system of feeding, cleaning of cages, and charting of growth records are given in detail. Eastman classroom film.

Football.

Scenes from a college football game (Kansas vs. Missouri). Excellent action, with passing, kicking, and tackling.

Football.

A college game between Kansas and Kansas Aggies. Many of the scenes are in slow motion photography. A 95-yard run after kickoff, forward passing and punting are seen.

Forest Fire Fighters of the Skies. (2 reels)

This film depicts how one country protects its forests from the ravages of fire by aerial patrol and service. Shows operations of air station; aerial patrol over forest; transportation of fire-fighting apparatus to scenes of conflagrations by air; actual fighting of fires by aerial forest protection forces.

Forest, The Conquest of the.

A film depicting the logging operations in the vast timber tracts of Ontario and Quebec, containing views of lumber jacks at work felling trees and preparing logs. Also views showing transportation of logs from the forest to waterways.

Franklin, Benjamin.

This film reproduces some scenes from the life of Franklin.

Glaciers, Daughter of the.

High among the snow-capped peaks of Jasper National Park lies this gem of Nature—Maligne Lake. Cold, clear, beautiful, it was born in the high-flung glaciers, guarded long by a company of Alpine Titans that lift their great heads into the clouds. In this film you are taken on a round of the Lake by boat, bringing before your eyes the beauty of this Lake.

Glass, The Romance of.

An instructive film taken in one of the largest plants manufacturing glass jars. Many views depicting the processes in the manufacture of glass products are shown. The history of glass from its early discovery by the Phoenicians to the modern method of blowing glass jars by machinery. Demonstration of cold pack canning.

Heavens, Communing with the.

A film trip through a large observatory. This film will do much to give a clear insight into the work of astronomy, seismography and other undertakings carried on in a modern observatory.

Illini Trail. (3 reels)

This three reel picture presents a cross-section of scholastic work, scientific research, and student life on the Urbana-Champaign and Chicago campuses of the University of Illinois. The film is of general interest.

*Induced Currents.

The principle of electromagnetic induction applied to commercial generators; the conversion of alternating current into direct current; the action of the commutator, transformer, and telephone. Teacher's guide. Eastman classroom film, deposited by Belvidere High School.

*Iron Ore to Pig Iron.

Outlines the mining of ore in the Mesabi range; its transportation to Duluth and through the "Soo" canal to Gary, Indiana, where it is smelted and cast into pigs. Teacher's guide. Eastman classroom film, deposited by Rockford Public Schools.

*Irrigation.

Pictures the effect of irrigation on arid lands; the Roosevelt Project; the Imperial Valley Project; irrigation in the region of San Diego. Teacher's guide. Eastman classroom film, deposited by the University of Illinois High School.

Isles of Sunshine.

This film depicts an ocean cruise to many interesting islands: Bahamas, Cuba, Haiti, Jamaica, Trinidad, Barados, and Porto Rico.

***Jefferson, Thomas.**
Interesting events in the life of Jefferson are depicted.

Lake and Highland Paradise, A.
This film depicts scenes of the lakes and highlands of Eastern Ontario, Canada.

Learn and Live (Value of First Aid).
A dangerous trip by automobile to a mine and a first aid class is the frame work for showing, in a realistic manner, safe and unsafe attitudes, methods and practices. The thrilling swimming near-tragedy and resuscitation is well done; converts the careless brother and prompts him to study first aid methods.

***Lenses.**
Emphasizes those phases of lens refraction admirably shown by animation: action of a converging lens, real and virtual images, changes of magnification; effect of a diverging lens and formation of the virtual image; construction and explanation of achromatic lenses. Teacher's guide. Eastman classroom film, deposited by the LaSalle-Peru Township High School.

Light of a Race, The.
This film depicts a historical account of artificial illumination. In successive scenes it depicts the use of the flint, stick and groove, drill, and match to obtain fire; and of the torch, stone lamp, candle, oil lamp, gas, and the incandescent lamp as sources of light.

Little Brother and Sister.
Deals specifically with the care of infants. How to bathe and handle infants. Effect of lack of sunshine on the infant's health. The importance of health examinations.

***Living Things Find a Home on the Earth, How.**
A film useful in nature study. Prehistoric animals, penguins, ostriches, snowshoe hare, hermit crab, frogs, toads, and butterflies are shown.

Lumbering in British Columbia.
This educational film, replete with scenic beauties, shows, in a graphic manner, the lumbering operations, from the felling of the giant trees to the export shipping of the finished product.

Machine Age, Behind the Scenes in the. (3 reels)
Deals with the general theme of human waste in industry, particularly as related to women workers. Special emphasis is given to technological changes as a possible factor in unemployment unless a well-planned program of adjustment of workers displaced by machines is adopted. The film portrays the efforts of the Women's Bureau of the Department of Labor to meet this problem.

***Machines, Simple.**
The simple machines, lever and inclined plane, are developed as fundamental to other machines. Principles of mechanical advantage, moments, work, efficiency, and conservation of energy are applied. Complex machines are shown to be combinations of simple ones. Teacher's guide. Eastman classroom film, deposited by Elgin High School.

Maritime Provinces, The.
This film contains glimpses of many of the outstanding features of the Provinces of Nova Scotia, New Brunswick and Prince Edward Island. View of Halifax, Charlottetown, St. John, Fredericton, Cape Breton, Annapolis valley, etc.

Market-Place, The Nation's. (2 reels)
This was taken on the floor of the stock exchange. A clear, graphic, and understandable portrayal of the method and system of transactions in stocks, accurately depicting the work inside and behind the greatest capital security market in the world.

Mazda Lamp Manufacturing. (2 reels)
This film briefly presents the development of artificial illumination. The successive stages in the manufacture of Mazda lamps are shown.

Metals of a Motor Car. (2 reels)
Shows use of metals and alloys in construction and operation of parts of a motor car and necessity of constructing them with combination of metals that will withstand heat, oppose wear, and resist shock. Depicts why numerous parts are made especially to withstand strain and twist, while others are

designed to give hardness and toughness, or resistance to shock and corrosion. Portrays the construction of many automobile parts.

Microbe, Man Against.
This film pictures the war which medical science has successfully waged against disease. It opens with a dramatic portrayal of the London Plague in 1665 and later scenes present Leeuwenhoek, Pasteur, Lister, and Von Behring. The film features the practical application of scientific discoveries, as in diphtheria immunization, milk pasteurization, the prevention of sepsis, etc.

Microscope, Beyond the.
This film, a simple visualization of a scientific subject, explains the decomposition of water into hydrogen and oxygen, the union of these gases in combustion, their atomic structure, and their combination to form a molecule of water.

Milk, Modern.
The processes involved from the milking of the cows to the canning and shipping of evaporated milk are shown in this film.

Milk Production and Pasteurization. (2 reels)
Traces step by step from the cow on the farm to the consumer at the dining room table, the production and distribution of milk under reasonably satisfactory sanitary conditions. Every scene shows some phase of the great milk industry as it operates day by day in Illinois.

Mining Nickel, Copper Ore.
This film depicts the operations in the mining of nickel and copper ore in a large mine.

Monel Metal, The Story of. (2 reels)
This film presents the educational study of a unique metal. Depicts the processes in manufacture and the many uses of monel metal. Many very interesting scenes.

Money, Making.
A film trip through the Royal Mint at Ottawa, the Capital of Canada, showing the various processes in the making of money.

***Newspaper, From Tree to.**
Includes the steps involved in felling a tree, getting out logs, floating them to market, making wood pulp, and making paper ready for printing in a newspaper plant. Teacher's guide. Eastman classroom film, deposited by Rockford Public Schools.

Niagara, the Glorious.
Niagara Falls, including the splendid panoramic and close-up views of the Horseshoe and American Falls, the whirlpool rapids and the Gorge, together with glimpses of their picturesque environs.

Niagara, Winter Witchery of.
Famous as one of the world's greatest scenic spectacles, Niagara in winter dress is incomparably beautiful. This film depicts the glories of the great cataract under the Frost King's magic mantle when its picturesque environs are transformed by frozen spray into weirdly beautiful and fantastically shaped ice formations.

***Now You're Talking.**
An interesting animated cartoon illustrating the harm that may result from improper handling of the telephone. Good for grade school children.

***Nursing—Routine Procedures, Home.**
Covers routine procedures in the care of a convalescent. The units are: (1) Taking Temperature, Pulse, and Respiration; (2) Preparing Patient for Breakfast; (3) Serving Food; (4) Preparing Patient for the Night. Teacher's guide. Eastman classroom film, deposited by Silvis Public Schools.

***Oceanews.**
This film depicts life on a large ocean liner. Shows how officers determine the ship's location.

Ontario's Summer Sorceries.
Depicts the scenic spots of beauty around Ontario.

***Optical Instruments.**
Utilizes the principles of reflection and refraction and applies them to optical devices. The film units are: (1) Mirrors; (2) The Eye and Spectacle Lenses; (3) The Camera; (4) Stereopticon and

Moving Picture Projectors; (5) Microscopes and Telescopes. Teacher's guide. Eastman classroom film, deposited by Pekin Community High School.

Panama Canal, The.

The story of a great engineering accomplishment is depicted in this film. It also illustrates the method by which the canal is operated.

Pearl Industry of Japan, The.

This educational film depicts the different operations in the cultivated pearl industry of Japan.

***People Who Live by the Sea.**

A film lesson in world geography. Farms in Italy, pyramids of Egypt, Parthenon of Greece, Colosseum and St. Peter's in Rome, Carthage, Constantinople, Venice, Genoa, Gibraltar, and Suez are shown. Visualizes how the Mediterranean has become a highway of commerce.

***People Who Live in the Mountain.**

Many beautiful scenes in Switzerland may be seen in this film. Mountains, lakes; snow storms, avalanches, and glaciers are shown.

***People Who Live Through Industry.**

In this film Germany is seen to develop from an agrarian to an industrial country. Scenes of the Rhine, Alps, vineyards, grain fields, mines, foundries, and factories.

***Philippine Islands, The.**

Pictures Manila; a sugar plantation; gathering, husking, chopping, drying coconuts; growing, threshing, hulling, polishing rice; preparing abaca stalks for hemp. Teacher's guide. Eastman classroom film, deposited by De Kalb High School.

***Plant, The Green.**

Stresses the fact that living things are dependent for food upon the green plant. The latter's processes of food-making and growth are accurately diagrammed. Sunshine and chlorophyll, water and air, acting jointly, are seen to produce sugar and starch, which are stored in roots, stems, leaves, and fruits. Teacher's guide. Eastman classroom film, deposited by West Chicago Community High School.

***Pond, Down at Our.**

A nature study film showing water animals. Frog spawn, tadpoles, turtle and eggs, and snakes are shown. Comparison of frog and toad. Snakes are shown sloughing their skins.

Posture.

Prepared in cooperation with the American Posture League. Good posture, both standing and sitting; the part played by muscles in determining whether it shall be good or bad; how to correct poor posture; and the importance of good posture in physical well being. Eastman classroom film.

***Pottery Maker, The.**

This film vividly illustrates the method of making pottery by hand. Shows shaping of the clay, glazing the utensil, and the baking process.

Power Transformers. (2 reels)

Only by contrasting the earliest transformer, weighing 20 pounds with the latest, which weighs 100 tons, can one appreciate the advance which has been made during the past thirty-five years in meeting the ever growing needs of industry. This progress is pictured in these two reels.

Ranger's Notebook, Leaves from a.

A travelogue film depicting the experiences of a Rocky Mountain Ranger in Picturesque Jasper National Park, Canada, and containing a host of beautiful and out-of-the-ordinary scenic material, edited and titled in unique manner.

Red-Head.

The importance of proper care of the hair is emphasized. The film is well adapted to grade school pupils.

***Refrigeration.**

The ammonia compression system of refrigeration applied to artificial ice-making and mechanical refrigerators—making "dry ice"; harvesting natural ice; construction of refrigerator cabinets; circulation of air due to convection. Teacher's guide. Eastman classroom film, deposited by Sterling Township High School.

***Relay Games, The Kansas (1930).**

Many of the events of this famous meet are shown. Slow motion pictures

of the shot put, 120 yard low hurdles, broad jump, pole vault, discus throw, 100 yard dash, javelin throw, high jump, and the mile relay are included.

River of Deep Waters, The.

This film depicts the steamer trip from Quebec up the Saguenay River to quaint Chicoutimi and offers glimpses of Murray Bay, Tadousac, the famous Capes, and other features that have made the Saguenay River famous for its historic associations and scenery.

Rubber, Romance of. (2 reels)

Scenes on one of the largest rubber plantations in Sumatra. Shows the rubber industry from seed planting to the finished product.

*Sahara, Life in the.

Illustrates nomadic life on the desert with scenes of camp life, a journey by caravan to the oasis market place, busy bazaars, lively bartering, a Mohammedan mosque, the return of caravans loaded with supplies. Teacher's guide. Eastman classroom film, deposited by Princeton Elementary Schools.

Salmon Are Caught, How.

This film shows the different methods used in catching salmon, and discloses something of the vastness of the industry.

Salt, Pillars of.

This picture was photographed at one of the largest mines and refineries in the United States, many of the scenes having been filmed more than a thousand feet underground. It depicts the processes by which salt is prepared for the market.

School Goes into Industry, A. (½ reel)

Shows how the boys and girls of a school built and operated a school cafeteria.

Seeing How You See.

Comparison of eye with scientifically ground lenses of a camera; abnormal conditions and remedies; eye examination and the defects and ailments which may be detected; graphic distinction between optician and oculist; the tragedy of poor vision.

Shoemaking, Romance of. (2 reels)

This film traces the development of the modern shoe historically. All the processes in the manufacture of a shoe are vividly pictured.

Shrines of American History, A Tour to.

A film sponsored by the National Committee on Boys and Girls Club Work. Takes the pupil to the colonial homes of Washington and Jefferson, the Gettysburg battlefield, Provincetown, Plymouth Rock, Boston, Washington, and A Century of Progress.

*Soil, The Formation of.

Introduces the student to the rock-soil cycle by means of demonstrations, animations, and actual photography. The story of the disintegration of rock includes the work of the weather, stream erosion and transportation, glaciers, wind and waves, rain and air, and plants and animals. Teacher's guide. Eastman classroom film, deposited by Oakwood Township High School.

Somewhere in Europe.

A film lesson in citizenship for grade school pupils. Shows immigrants coming to the United States.

*South, The New.

Traces the rapid progress of the New South; its agricultural products—cotton, tobacco, rice, early vegetables, fruits, nuts; raw materials—marble, aluminum ore (bauxite), coal, limestone, iron; and water power for the paper, cotton-goods and other industries. Birmingham, Mobile, New Orleans, and Miami are shown. Teacher's guide. Eastman classroom film, deposited by the Greeley School, Winnetka.

Spare Time. (2 reels)

This film is one of human interest and explains the forest conservation of Canada. It carries a story throughout and ends with a thrilling climax when Jack Baldwin, who entered the Forest Service because he thought it was a good place to loaf, saves the life of his chief while fighting a forest fire.

Spark Plug, The Story of a. (2 reels)

This film illustrates the operation and use of spark plugs in various vehicles propelled by motors. Animated drawings showing action of spark plug and value of good insulator. Also depicts the processes in the manufacture of a spark plug from mining of sillimanite

to the packing of the plug. Suggestions on proper operation of spark plugs.

***Spiders.**

Aids in recognition, illustrates characteristic habits, and shows the development of several species of spiders, by means of interesting actual photography and animated diagrams. The units are: (1) structure of the spider; (2) spinning an Orb web; (3) rearing the young; and (4) trapdoor spiders. Teacher's guide. Eastman classroom film, deposited by Springfield High School.

Storage Battery, The Story of. (2 reels)

Reel 1 shows the historical development of the storage battery, and the various steps in its manufacture. Reel 2 shows the various ways in which the battery is tested, sealed, and packed. Animated drawings visualize action in battery during charging and discharging.

Sugar Maple Tree, Harvest of the.

An educational film depicting life in the sugar bush, demonstrating the old and new methods of tapping maple trees, of gathering sap, and transporting it to the kettles. It shows the boiling in modern evaporators, the bottling and canning of the maple syrup in the factory, and finally, an old fashioned sugar bush party.

Sulphur. (2 reels)

This film depicts all the processes in the production of sulphur: drilling wells; sending steam to bottom of wells; storing liquid sulphur; removing of sides of sulphur vats; blasting and shipment of the cooled sulphur. Animated drawings depict the many uses of sulphur; also explains the numerous uses of sulphuric acid, which consume about three-fourths of the crude sulphur produced.

Teeth, Care of the.

A film that records, by labeled radiographs, animated drawings, and actual photography, the parts of a tooth, prophylactic treatment, the progress of decay, the effects on the teeth of bad habits and disease, and the rules for systematic home care and brushing of teeth. Eastman classroom film.

Tire, Story of a.

Depicts the many processes in the manufacture of a tire. Shows the sources of materials: rubber plantations, cotton plantations, textile mills.

Valves, Their Manufacture and Uses. (3 reels)

Close-up views and cross sections of angle, globe, gate, and check valves. Complete story of the manufacture of brass valves. Shows the making of iron and steel valves, including forging poppet, butterfly, check, and gate valves; 27 foot butterfly valve, the largest made.

Voice of Business, The. (3 reels)

These reels tell the story of paper, from the cutting of the pulpwood to the shipping of the watermarked paper. All of the various processes vividly portrayed.

***Volcanoes.**

Quiet overflow types are contrasted with volcanoes having explosive eruptions. Products of volcanoes and the life history of a volcanic cone. Subjects include Hawaiian volcanoes, the Palisades, eruptions of a South American volcano, Mt. Vesuvius, and a recent cinder cone of Lassen Peak. Teacher's guide. Eastman classroom film.

***Washington, George.**

A lesson in citizenship for grade school pupils. Scenes depicting the Revolutionary War, Washington's inauguration, and Mount Vernon are shown.

***Water Cycle.**

Graphic presentation of the continuous circulation of water, from earth to sky and back to earth. Examples of evaporation, condensation, precipitation, storage, and run-off are given. Teacher's guide. Eastman classroom film, deposited by Danville Public Schools.

***Water.**

The steps in securing a city's water supply are shown. Watershed, dam, reservoir, valves, etc., are pictured. Old fashioned water mill and modern power plant are shown.

***Webster, Daniel.**

Scenes depicting the boyhood of Webster and Webster in Congress. The

Capitol at Washington, Washington Monument, Statue of Liberty, and the Senate chamber are shown.

Within the Gates. (2 reels)

Emphasizes in the story of Dad's shirt, the part played by women in the country's mass production and business. Women's contribution is shown in the picking of the cotton, the mill processes, the packing, shipping, and selling of the finished product.

Women's Bureau, Story of the.

Shows the development of the Women's Bureau (U. S. Department of Labor) out of the need for definite information about conditions under which women are working and for leadership in the establishment of standards for their employment.

***Worker, The Industrial.**

A film lesson in vocational guidance. Comparison of number of pupils finishing grade school, high school, and college. Conveys the necessity of preparing one's self for opportunities which may arise.

X-Ray, Revelations by.

This is a pictorial record of the revolution effected in the medical art and in some branches of industry by the discovery and application of the x-ray. The film includes views of the anatomy and functions of the human skeleton as revealed by this development in electrical science, and indicates uses to which it is put in manufacturing processes.

Yoke of the Past. (3 reels)

This film depicts a century of progress in Agriculture. It presents a sympathetic picture of the farmer's problems and is also intended to inform the farmer, himself, of modern methods by which these problems are being solved.

Yosemite, Glimpses of.

This film is a scenic travelogue through the Yosemite National Park, showing the high waterfalls, the rugged mountains and the beautiful canyon drives.

Alphabetical List of 35mm Films

See page 3 for regulations governing the 35mm film service.

Films on safety (non-inflammable) stock are indicated by the word "(Safety)" following the title. All other films are on nitrate (inflammable) stock. The film subjects are one reel in length unless otherwise indicated.

Anaconda Sheet Copper, Manufacture of. (Safety) (2 reels)
This film shows the story of copper from mine to consumer: scenes in mine; crushing, screening; smelting; forming of copper; making of copper into anodes and refining by electrolysis; rolling; casting into bars.

Annapolis, Apples of. (Safety)
See description of 16mm film by the same title.

Anthracite.
This film depicts the story of anthracite mining from the crude methods of a century ago to the modern and efficient systems now in operation.

Asbestos. (Safety)
Shows sources of asbestos; blasting of asbestos bearing rock and combining the longest and finest asbestos fibers; making of textiles and many other asbestos products, such as fireproof rope and packings, gaskets, asbestos paper, fireproof shingles, etc.

Benefactor, The. (Safety) (2 reels)
In this film the story of Thomas A. Edison's life is depicted. Beginning with his early boyhood at Milan, Ohio, his birthplace, the picture reviews many interesting events in Mr. Edison's career. Tells the story of the inventor's untiring efforts and of the scientific triumphs through which he conferred great and permanent benefits on mankind.

Big Deeds. (2 reels)
This film depicts a trip through the Schenectady Works of the General Electric Company and shows the manufacture of many different classes of electric equipment, from delicate laboratory apparatus to great turbine generator sets.

Bituminous.
This film depicts the mining of bituminous coal with special reference to the development of various methods according to the location and type of mine.

Bread, Our Daily.
This film reviews the evolution of the wheat industry from the primitive methods of harvesting, threshing, milling, and baking to the modern use of machinery.

Brick: From Clay to Pavement. (Safety)
The progress of clay through the plant until it is laid on the road as vitrified paving brick. Of general technical interest.

Bronze Back, In Quest of the. (Safety)
See description of 16mm film by the same title.

Busybody, The.
This film, different from most, animates 175 parts which are comprised in the smallest motor. After this little machine has built itself on the screen, a number of its practical applications are illustrated.

Cane Sugar. (Safety) (2 reels)
See description of 16mm film by the same title.

Carrying American Products to Foreign Lands. (Safety)
This film shows a diagram of a steel ship, the cargo holds, captain's and officers' quarters. Shows placing of cargo for export; details of running a ship; unloading imports.

Cascades, The Conquest of the. (Safety)
The Cascade Mountains have always presented a difficult obstacle to transportation between the East and the seaports of the Pacific Northwest. This film depicts the new Cascade Tunnel and emphasizes its contribution to easier and faster transportation.

Caterpillar Combine. (Safety)
In the Wheat Belt of the United States and Canada, one of the most in-

teresting events of the year is the harvesting of grain. This film shows Caterpillar combines at work in the steep Palouse country of Washington, the delta lands of California, and in the great plains states.

Caterpillar Combine, Evolution of the. (Safety)
An historical type of film illustrated with small patent models. Story starts with the first combine-harvester, the Moore-Haskell, which was built in Kalamazoo, Michigan, in 1833, and continues down through the various steps to the present day combine.

Cedar Camps in Cloudland. (Safety)
A strikingly photographed scenic survey of the telephone-pole making industry amid the mountains of the North Pacific coast.

Cocoon to Spool, From. (Safety)
This picture visualizes the silk industry. It depicts the eggs of the silk worm; the eggs hatching; silk worms feeding; spinning the cocoon, etc., and includes views of the silk factories and Japanese women at work.

Colorado, Pictorial. (Safety)
Scenic spots of Colorado, particularly near Colorado Springs. Many beautiful mountain views are shown. The film will be popular in general audiences.

Conductor, The.
This film illustrates the manufacture of lamp cord, showing the transformation of raw copper from the Rocky Mountains, cotton from the South, rubber from Brazil, and silk from Japan into the finished product.

Corn-Borer and What to Do about It. (Safety) (2 reels)
This film depicts the life history of the European corn-borer and recommends to corn belt farmers methods for keeping this dangerous insect under control. Shows the laying of eggs by the moth, the hatching of the young larvae, molting, and emergence of the adult. Illustrates methods of control.

Cotton, The Land of. (2 reels)
This film depicts the processes in the cotton industry from the planting of the seed to the weaving of the fabric, and includes typical scenes at the world's largest plantation and most important cotton terminal, and in one of its greatest textile mills.

Cotton: From Seed to Cloth. (Safety) (2 reels)
See description of 16mm film by the same title.

Courage, Reward of. (2 reels)
A very fine picture on cancer prevention and control. The story has enough plot to make the picture interesting as well as instructive.

Crops, Row. (Safety)
Depicts the work of the row crop farmer and truck gardener. Shows seedbed preparation, planting, cultivating, harvesting, and preparation of the fields for the following year, and how Caterpillar tractors do these jobs.

Cuba, the Island of Sugar. (2 reels)
This film shows the world's greatest achievement in the cane sugar industry. Tells how cane sugar is produced in the largest sugar mill in the world. Depicts beautiful scenes in and around Havana, including home and gardens.

Diphtheria Germ, Conquering the. (Safety)
A good human interest film that depicts in a very interesting and entertaining way the efficacy of antitoxin in fighting diphtheria.

Dirt Moving. (Safety) (2 reels)
This film shows Caterpillar tractors at work on many of the contractors' difficult jobs of dirt moving. These include building of dams, levees, roads, fire trails; coal stripping; and other jobs where dirt is moved by the thousands of yards.

Disease, How Plants and Animals Spread. (Safety)
Parasitism is explained by animated drawings showing how the mistletoe attacks and lives upon the oak tree. How bacteria feed upon the poison animal or plant life, and how they multiply. Types of bacteria and the diseases they cause. Bacterial infection of teeth; action of white corpuscles. Tuberculosis bacilli; fresh air and sunshine their enemies.

Disease, How to Prevent. (Safety)
Photographs and animated drawings picturizing the water supply, and the

dangers that lurk behind ignorance and carelessness; the menace of wells and springs contaminated through rock fissures and favorable soil formations. Animated graphs showing reduction in general death rates for different diseases as a result of preventive measures such as the pasteurization of milk, quarantine, vaccination, the use of antitoxin, etc.

Drinking Health. (Safety) (2 reels)
See description of 16mm film by the same title.

Earth's Four Corners. (Safety)
Presents story of a man's journey to the four corners of the globe in search of high quality raw materials. Film takes you to Peru, China, Australia, Rio de Janeiro, England, Canada, and Northwestern U. S.

Edison, Thomas A.
See description of 16mm film by the same title.

Federal Reclamation, The Story of. (Safety) (2 reels)
This film depicts the steps in reclamation by irrigation from the desert to completed farm. A United States Department of the Interior film.

Fly, as a Disease Carrier, The. (Safety)
Compelling picturization of information of great importance to the public: the structure of the house fly; its feet, proboscis and crop, as related to the distribution of bacteria; the breeding and feeding habits of the fly, with special relation to spread of disease; also life history and practical suggestions toward extermination.

Food Shot from Guns. (Safety)
This film depicts the picturesque rice fields of the Orient and their old methods of threshing. Modern rice fields are shown with methods of threshing. Cooking process in guns which automatically "shoot" the grains out when cooked enough.

Forest, Conquest of the.
This film presents scenes in the logging country of the Northwest. Pictures a comprehensive view of the lumber industry, its magnitude and modern methods of operation.

Forest, The Conquest of the. (Safety)
See description of 16mm film by the same title.

Forestry, Modern. (Safety)
A logging picture which shows duties of the forest patrolmen, their job, the advantage of firebreaks and trails, and the result of carelessness in the forest.

Fruitland. (Safety) (2 reels)
This film depicts the beautiful Niagara peninsula in full blossom. Modern methods in the care of orchards are pictured. Also the cherry canning industry is shown in detail.

Fur Industry of the United States. (Safety) (3 reels)
This film presents a comprehensive survey of the fur resources of the United States; the different types of fur farms; utilization of fur.

Gasoline Motor, The Story of the. (Safety) (3 reels)
Reel 1.—This film depicts by animated drawings action of gasoline in the cylinders and other working parts of a gasoline engine.
Reel 2.—Forging; machining and testing of principal parts of a motor and their operation in the motor.
Reel 3.—Working of inlet and outlet valves, timing of action, and other interesting facts concerning gasoline motors.

Gasoline, The Story of. (Safety) (2 reels)
Reel 1.—This film opens with data on annual consumption of gasoline in the U. S. Shows panoramic views of oil fields, storage tanks, pumping stations, maps of pipe lines in U. S.; steps in manufacture and refining of gasoline.
Reel 2.—Depicts additional treatment of gasoline to prepare for commercial use; shows cracking process, tests of the product and steps in transportation.

Glass, The Romance of. (Safety)
See description of 16mm film by the same title.

Greenland, Glimpses of. (Safety)
This film was secured during one of the Canadian Government Arctic Expeditions that visited Godhavn, the capital

of Greenland, and contains interesting glimpses of the region, its Eskimo inhabitants and their lives.

Harvesting, The Windrow Method of. (Safety)

Where grain ripens unevenly, or the fields are filled with weeds, the grain is often cut with the windrow header and laid in windrows until it is dried, and then is picked up with a windrow pick-up unit and the grain carried into the combine and threshed. There are some very beautiful shots in this film from a photographic angle.

Health.

This is a popular film that deals with exercise and balanced diet and is very good for school use.

Hogs, Health, and Happiness. (2 reels)

A farm film on hogs (McLean County System) and farm management.

Home Canning. (Safety)

This film shows the very latest up-to-date methods of home canning and shows the convenient but inexpensive equipment necessary to make the task an easy one. The canning of the common vegetable is shown step by step. The use of the sealer in sealing the tin cans is shown. The making of jelly and the canning of chicken is illustrated.

Honey Bee, Realm of the. (Safety) (4 reels)

This film depicts comprehensively the life history of the honey bee and contains some unusual close-ups.

Industrial. (Safety)

This is a general interest picture showing tractors at work on some of their many industrial jobs.

Island of Yesterday, The. (Safety)

Sumatra, Dutch East Indies, native life, celebration of pay day, the jungle, clearing, the various processes in the rubber industry are all shown in this film.

Jungle, Conquering the. (Safety)

The film depicts the rubber industry in Sumatra, road into jungle, natives, germination of rubber tree seeds, processes.

Lead Mining and Milling, The Story of. (Safety) (3 reels)

Reel 1.—Pictures relative production of lead by countries and states; prospecting, driving of tunnels, mining and loading of ore.

Reel 2.—Shows hauling of mine cars to shaft by electric locomotive; emptying car by rotary dumps; hoisting ore to mill; crushing ore; and concentration on tables.

Reel 3.—Depicts concentrating tables; de-watering and stacking of tailings; regrinding of middlings; filtering and drying; and community scenes.

Learn and Live (Value of First Aid).

See description of 16mm film by the same title.

Levee, Working on the. (Safety)

This film carries a human interest element that runs all the way through the picture. Most of the levees along the Mississippi have been built by Caterpillar tractors with Negro drivers and wagon tenders. The theme of this picture is woven around these two. From a photograhic standpoint this is a beautiful film.

Light of a Race, The.

See description of 16mm film by the same title.

Liquid Air. (Safety)

This picture shows the production of liquid air and illustrates a number of laboratory experiments — among them the operation of an engine whose boiler uses a liquid at more than 300 degrees below zero F.

Logging, Northern. (Safety)

Lumbering in the northern section of the United States and Canada in winter months. The background of snow makes some beautiful scenes. Sled logging trains.

Lumbering in British Columbia. (Safety)

This educational film, replete with scenic beauties, shows, in a graphic manner, the lumbering operations, from the felling of the giant trees to the export shipping of the finished product.

Malaria. (Safety) (3 reels)

This picture shows relation between

mosquitoes and malaria. No better photography of actual life anywhere. Very good for instructional purposes.

Man Made Miracles. (Safety)
This film shows how the radio is made and explains the importance of the radio tube. The picture is instructive to technical students and of especial interest to radio fans.

Market-Place, The Nation's. (Safety)
See description of 16mm film by the same title.

Mechanics of the Nation's Market-Place, The. (Safety) (2 reels)
This film gives a definite and accurate record of the training and education given to the youthful employees of the New York Stock Exchange. Shows how young men are trained for future work in finance and big business.

Microbe, Man Against. (Safety)
See description of 16mm film by the same title.

Microscope, Beyond the.
See description of 16mm film by the same title.

Miner, When a Man's a. (Safety) (4 reels)
A four-reel picture with very interesting action throughout. The picture has a plot which holds the interest of the spectators. A lesson in the value of safety measures is forcibly taught. A very worthwhile picture for entertainment.

Mosquitoes. (Safety) (3 reels)
This film discusses the mosquito as a pest affecting man and beast; varieties and life history; safe-guards and methods of control.

National Parks, Roads in Our. (Safety)
The scenic wonders of Yosemite, Glacier, Rocky Mountain, Mount Ranier, Mount Lassen, and Mesa Verde National Parks make this film one of unusual beauty and interest.

Niagara, the Glorious. (Safety)
See description of 16mm film by the same title.

Northwest Coast Resorts. (Safety)
The tide rises and the tide falls. This film depicts ocean beaches which are popular playgrounds along the Pacific Coast of Oregon and Washington.

Old and the New, The. (Safety)
Part of this film was photographed in the Pimas Indian Reservation and shows the old and new way of land reclamation and also shows the contrast in crop raising, etc.—an interesting picture.

Orange, Power behind the. (Safety)
Miles and miles of orange-producing trees are beautifully photographed with many highly entertaining and interesting scenes. Shows use of modern machinery in production of oranges. Activities in an orange packing plant are pictured.

Orchards, Eastern. (Safety)
An interesting and entertaining film on the subject. Spraying, plowing under cover crops, harvesting, pulling dead trees, etc., are depicted.

Panama Canal, The. (Safety)
See description of 16mm film by the same title.

Paper, The World of. (2 reels)
This film embraces, in a brief pictorial history, the arts of writing, printing, and paper making. It shows primitive races cutting records in stone, Egyptians preparing papyrus, and the Chinese making the first paper ever used by man. The picture culminates in the largest modern paper mill, with its elaborate machinery and immense production.

Partners Three. (4 reels)
A dramatic human story of youth on the farm. Answers the question, "Whither our farm boys and girls?" Pictures 4-H Club ideals in a story written by a club member and acted by club members. Produced under the guidance and cooperation of leaders in the 4-H Club movement.

Posted, Well. (Safety) (2 reels)
A farm picture of general interest which contrasts the farms of two farmers, one of whom is a business-like manager and the other a poor manager.

Potter's Wheel.
This film is a study in industrial evolution and illustrates the manufacture of porcelain for electrical apparatus — the mixing of the ingredients, moulding,

turning, glazing, and the final firing in huge kilns.

Power Transformers. (2 reels)
See description of 16mm film by the same title.

Queen of the Waves.
This picture tells the story of American navigation, from the floating logs and rude crafts of the primitive natives to the massive, electrically propelled battleships of today. It is a good picture, both as a historical review and as a chronicle of technical achievement.

Rabbit Farming. (Safety) (2 reels)
This film depicts different breeds of domestic rabbits; rabbitries of various types; possibilities of rabbits for meat and fur.

Rails, King of the. (Safety)
This film depicts the development of land transportation from the most primitive methods to modern railroad electrification. Transportation by the Indians, the stone-boat, wheelbarrow, horse drawn vehicles, and prairie schooners are produced in their appropriate surroundings. Steam and electric locomotives are shown in freight and passenger service.

Ranger's Notebook, Leaves from a.
See description of 16mm film by the same title.

Reaper, Romance of the. (Safety) (2 reels)
This film is one of historical interest. Depicts the cutting of grain by reaping hook or sickle, scythe, and cradle; McCormick's invention of the first reaper; evolution of grain harvesting machines from McCormick's reaper to the harvester-thresher of today.

Rio, Rollin' Down to. (Safety) (2 reels)
Very interesting picture which depicts a voyage along the east coast of South America. Scenes in Brazil, Argentina, Uruguay; coffee plantations, rattlesnake farms, mountains, water falls, cities, etc., are shown.

River of Deep Waters, The. (Safety)
See description of 16mm film by the same title.

Road Maintenance. (Safety)
After a road is constructed, it must then be kept in condition. Any improvements or repairs made to it are classified as "maintenance." The film shows tractors and various road machines at work. Good photography.

Roads, Open. (Safety)
Keeping the public highways open throughout the winter months has long been a paying investment. This film shows a rotary snow plow busking 10 foot drifts, and many other interesting scenes.

Roads to Wonderland. (Safety)
Scenic spots reached by roads that are being built by the Federal, State, and county governments; Mount Hood in the Oregon National Forest; Crater Lake in Crater Lake National Park; and Yosemite National Park.

Rubber, Romance of. (Safety) (2 reels)
See description of 16mm film by the same title.

Safe Bet, A. (2 reels)
A film on the farm task of corn husking. Shows Illinois state corn husking contest and the national contest held at Norton, Kansas. Includes a human interest story.

Salmon Are Caught, How. (Safety)
See description of 16mm film by the same title.

Salt, Pillars of.
See description of 16mm film by the same title.

Sheep—Some Leading Breeds. (Safety)
Shows many breeds of sheep including those grown for mutton, those grown for wool, and those grown for both. Breeds shown include: Leicester, Cotswold, Lincoln, Southdown, Shropshire, Hampshire, Dorset, Cheviot, Oxford Down, Merino, Rambouillet, and Corriedale. Depicts the shearing of sheep and the packing of the wool.

Ship, The Electric. (Safety) (2 reels)
In this film the audience is taken on a trip from New York to San Francisco aboard a new all-electric liner. Shows many enjoyable and interesting features of the trip and also many interesting features of the electric ship equipment.

Sixth Sense—T. C., Your. (Safety)
This film depicts the effect of temperature on human beings. Shows the

origin of the thermometer and the method of calibration.

Southern Cross, Under the. (Safety)
This is a companion picture of *Rollin' down to Rio* but not a duplicate.

Steel, The Making of. (Safety) (2 reels)
A compact visualization of the steel industry. Shows every important phase of steel making, from the ore mines of Minnesota to the making of rods and bars, ready for manufacture into parts for machines. Shows melting of iron in open hearth furnace with temperature at 3000 degrees F.

Steel—Manufacture of Pipe, The Story of. (Safety)
This film depicts the manufacture of pipe; rolling and cutting of blooms; and the inspection and testing of products.

Steel—Rails, Rods and Plates, The Story of. (Safety)
This film is devoted to details in the manufacture of rails, rods and plates; pictures steps in process through to final inspection, cutting and finishing for market.

Steel—Wire Products, The Story of. (Safety)
This film shows the manufacture of wire products; preparation of rod; drawing of wire; galvanizing of wire; making wire fence; winding of wire; and cold rolling of flat stock.

Stick, The Story of a.
Pictures the story of felling the trees, cutting the logs to length, pulling them to a center loading place, the work of loading the logs on cars to be sent to the mill pond. Shows scenes at the saw mill, reforestation and farming the cut over land.

Sugar Trail, The.
The methods employed in the sugar industry are depicted in this film, beginning with the harvesting of the wild beet. Animated statistics illustrate the extent of the world's consumption of sugar.

Teeth, Clara Cleans Her. (Safety)
This film is intended through incidents of a very plausible story to stress the necessity of using the toothbrush daily. A motion picture story for children that can be more effective than many words in getting them to care for their teeth. The film holds interest throughout and teaches a lesson forcefully.

Telephone Repeater, The. (Safety)
This film carefully depicts the telephone repeater which amplifies the voice current at intervals across the country, making possible a nation-wide telephone service.

Telephone Together with Trick Photography, Putting a. (Safety)
This film depicts the 5,248 mathematically calculated movements which give life-like action to the component part of the telephone, which assembles itself before the spectator's eyes.

Terracing and Earth Moving on the Farm. (Safety)
Shows the various steps in making a well farmed terrace. Several methods are illustrated. Last part of picture illustrates jobs of earth moving on the farm.

Tioga Pass, Over the. (Safety)
This film depicts a two-day drive from Yosemite to Lake Tahoe over the Tioga Pass in the high Sierras. Big trees, lakes, historical points, high peaks, all combine to make this a beautiful picture.

Tracks, Why the? (Safety)
Compares the performance of the track-type and wheel-type tractors.

Twine, The Making of. (Safety)
Interesting processes in the manufacture of binder twine, from the cutting, stripping, curing, bleaching, drying, baling and shipping of the fiber in Yucatan and the far-off Philippine Islands to the drawing, spinning, and baling in a large twine mill.

Weather Above, Watching the. (Safety) (2 reels)
Depicts aerial activity; importance of weather forecasting to successful aviation; how observations are made for flying weather forecasts. Of general interest.

Wheels of Progress. (Safety)
A pictorial tale of transportation in America from the day of the bicycle

and the fancy turnout to modern methods of transportation. How the gasoline engine revolutionized American transportation and how the motor car and the truck are contributing to progress and prosperity in the U. S.

Wild Life Resource, Our. (Safety) (2 reels)

American Fauna as it existed in this country in the Sixteenth Century is contrasted with the fauna of today; the diminution of wild life and what is being done about it is discussed; many wild creatures are shown in their natural habitat.

Wildwood Workers. (Safety)

This film pictures typical activities of the sawyers, axemen, teamsters, and bayou boatmen in the great pine forests bordering the Gulf of Mexico.

Wireless, Wizardry of. (2 reels)

This film begins with the history of signal communication—the beacon fire, smoke signals, heliograph, semaphore, electric telegraph, and telephone. By means of animated drawing, the film explains the operation of the vacuum tube and other apparatus used in radio transmission and reception.

Woolen Yarn, A.

This film depicts the successive steps in the wool industry, from sheep-shearing to the manufacture of cloth. It also reviews the history of the industry and shows the various methods and machines now used in carding, spinning and weaving.

X-Ray, Revelations by.

See description of 16mm film by the same title.

Yellowstone, Geysers of. (Safety)

This film features the spectacular geysers which have caused our greatest national park to become world famous for its strange natural phenomena.

Yoke of the Past, The. (3 reels)

See description of 16mm film by the same title.

Alphabetical List of Glass Slide Sets

1. See page 3 for regulations governing the slide service.
2. Do NOT EXPOSE SLIDES TOO LONG to the heat of an arc light.
3. Replace slides in their proper order.
4. When unpacking slides, please note carefully how they are packed and repack them IN THE SAME MANNER.
5. Do not try to force slides or packing boards when packing. Pack them snugly but do not force them or damage will be done.
6. Handling of slides with the fingers on the glass surfaces may destroy much of the clearness of the picture on the screen.

Note—Following the description of the slides (in parentheses) is given first, the number of slides in the set; second, whether slides are plain or colored; and third, whether there is a manuscript which explains the individual slides.

Æneas, The Wandering of.
These slides illustrate the first six books of the Æneid. (50, plain, descriptive notes).

Alfalfa on Every Farm.
These slides set forth some of the main points that will lead to a better understanding of the benefits derived from growing alfalfa. How to get alfalfa started; how to care for it. Shows distribution in U. S.; cutting; food values; alfalfa and nitrogen; lime; inoculation; drilling; haying; stacks. (59, partly colored, descriptive notes).

American Farm Home, Make Its Work Easier.
Home making is the noblest of professions but the sorriest of trades. A good home provides comfort, profit, and pleasure. Attractive home; flowers, shrubs; well arranged kitchen; screen; water supply; power machines for the farm home; septic tank; what to eat; garden; poultry; etc. (59, plain, descriptive notes).

Beetle, The Japanese.
This set illustrates the life history of the Japanese beetle, the damage done by it, and the methods of controlling it. (37, plain, descriptive notes).

Cæsar, Julius: His Career.
This is an excellent set. Map of Roman dominions; Map of Rome; Marius; Sulla; Pompey; Roman Schools; Cæsar; Gladiatorial Combat; Roman Army; Captive Gauls; attack on German village; Cæsar Crossing the Rubicon; Cleopatra and Cæsar; Brutus; Assassination of Cæsar; Anthony's Oration. (51, plain, descriptive notes).

Cæsar, Julius: The Gallic Wars.
This set of slides illustrates many incidents in connection with the Gallic Wars. (50, plain, descriptive notes).

Canada, Coast to Coast.
A cross section of Canadian development showing some of the industries, scenery, and cities of this country. A wonderful group of slides descriptive of the scenic beauties and industries of Canada. Map showing forest and forest industries; other maps, harbors; fishing industry; agriculture; cities and towns; paper making industry. (100, colored, descriptive notes).

Canada, Geography of.
Practically same as the set "Canada, From Coast to Coast" with the exception that those slides not dealing specifically with geography have been eliminated. Agriculture; transportation; mining; forestry; fishing; and scenic. (75, colored, each slide titled).

Canada's Arable Lands and Agriculture Development.
Maps showing distribution of arable lands and different crop areas. Typical agriculture scenes. Orchards; crops; power farming; ranches; herds of stock; irrigation projects; prairies. Planting; harvesting; and threshing. (62, colored, descriptive notes).

Cicero.

This set of slides deals chiefly with the orations read in Latin classes in high schools. (50, plain, descriptive notes).

Corn, America's Greatest Crop.

These slides and lectures were designed to impress upon the corn-growers of the United States the great opportunity for the improvement of the yield and quality of the corn crop. Much improvement may be made by putting into practice a few simple methods at little or no extra cost. Gathering and caring for seed; shelling; grading; testing; planting, and cultivating. Shows the root worm, root louse, and grub. (59, colored, descriptive notes).

Dairying.

This set of slides illustrates the fact that the cow makes farming more profitable. The cow as a producer; types of dairy breeds; poor cattle; pure breed sires; calf clubs; silos, various types; use of alfalfa; feed lot; pure water; types of dairy barns; sanitary methods; milking machines; separators. (59, partly colored, descriptive notes).

Electricity—A General Science Unit.

This is a fine set edited by Dr. Webb, of Peabody College, and is correlated with the North Central Association course for this unit. (20, plain, excellent teacher's guide).

Farm Sanitation.

This set of slides illustrates many aspects of farm sewerage and sanitation. Relation of privy and well; how to drain kitchen sink; cesspool; septic tank. (32, plain, descriptive notes).

Flies and Their Control.

Illustrates eggs, larvae, pupae, and adult flies. Shows dangers to health from flies; breeding places of flies; conditions favoring fly menace; and methods of destroying flies. (52, plain).

Hen, Selecting the Laying.

This set of slides pictures the methods of culling the poultry flock. Shows physical characteristics by which the good egg producer can be recognized. (36, plain, descriptive notes).

Honey Bee, Anatomy of the.

A very complete set of slides illustrating the anatomy of the honey bee. Egg, larva, and pupa; entire body of worker bee; face of bee; head of worker bee; mouth parts of the worker; wings; legs; and abdomen. (31, plain, descriptive notes).

Honey Bee, The Life History and Behavior of the.

This general set on the honey bee shows queens, workers, and drones; life in hive; worker and drone brood; queen cells; larvae; young bees; comb honey; extracting machine; etc. (35, plain, descriptive notes).

Illinois, Geography of.

A set of hand colored slides selected by Professor W. O. Blanchard of the University of Illinois and duplicate in large part of the illustrations in Brigham-McFarlene-Blanchard Geography Series (grade 5). (109, colored, each slide is titled).

Insects, Importance of to Man.

Importance, abundance, and nature of insects. Injury to crops and animals; carriers of diseases; their value to man; their structure and physiology; fundamental principles of insect control. (25, plain, descriptive notes).

Insects, The Structure of.

Head and mouth parts of grasshopper and of caterpillar; life stages of mosquito; heart and nervous systems of a grasshopper; reproductive organs of moth; grasshopper laying eggs. (19, plain, descriptive notes).

Livestock on Every Farm.

The purpose of this set of slides is to show the advantages of live stock farming. Necessity of pure-bred stock. Advantages of diversified farming and the importance of livestock on every farm; soil fertility; manure pit; silo; fodder; sanitation. (59 slides, partly colored, descriptive).

Macbeth.

These slides give an illustrative background for the Shakespearian play "Macbeth." (20, plain, descriptive notes for each slide).

Mouth, Policing the.

These slides were made under the direction of Dr. W. W. Peters of the Cleanliness Institute, New York City. The set is built around the fact that a very high per cent of the organisms in

communicable diseases enter or leave the body through the mouth or nose. The importance of hygienic and sanitary measures is forcefully stressed. (39, colored, descriptive notes).

Plant Propagation.

This set illustrates the different aspects of plant propagation. Germination; preparing soil; potting cuttings; preparing hotbed; grafting; successive steps in whip grafting, inlay grafting and budding. (49, plain, descriptive notes).

Plants: Living Things.

This set is also a general science unit, edited by Dr. Webb. Closely correlated with N. C. A. recommended course. (20, plain, excellent teacher's guide).

Pork, and How to Cook It.

This new set of slides is rather well described by its title. Illustrates the ways of preparing pork cuts for the table. (60, plain, descriptive notes).

Poultry.

This set of slides illustrates how one can make more from poultry farming. Poor and good types of hens; housing; feeding; care of baby chicks; equipment for poultry farming. (59, partly colored, descriptive notes).

Quebec, The Province of.

This is a beautiful set of colored slides showing many interesting features of the province of Quebec. Buildings; monuments; cities; rivers; rural scenes; crops; industries. (71, colored, descriptive notes).

Rats, How to Get Rid of.

This set shows the types of damage done by rats and various methods of rat control. Breeding places of rats; rat highways; annual cost of rats. (55, plain, descriptive notes).

Reclamation, Story of.

This set of slides pictures many of the federal drainage projects: Jackson Lake Dam; Elephant Butte Dam; Pathfinder Dam; Arrowrock Dam. Pictures many crops growing on reclaimed land. Teaches the great importance of this work. (59, colored, descriptive notes).

Roman Communication and Travel.

These slides illustrate the roads, bridges, streets, and means of travel used by the Romans. (50, plain, descriptive notes).

Roman Games and Amusements.

Illustrates many games played by Romans: game of the rope, hide and seek, cock fight, ball, victor and vanquished, dice. Also many Roman amusements are illustrated: swimming, chariot races, theater, gladiatorial combat. (50, plain, descriptive notes).

Roman House, The.

Illustrates Roman street, various Roman houses, pottery, paintings, panels, furniture, kitchen utensils, etc., of Roman houses. (50, plain, descriptive notes).

Roman Mythology.

This set illustrates many striking episodes in Ovid and Virgil. An interesting set. (61, plain, descriptive notes).

Roman Trades and Crafts.

These slides illustrate plows, spades, agriculture implements, mills, etc., used by the Romans. Roman blacksmiths, cobblers, gold smiths, architects, carpenters, masons, and stone cutters are pictured. (50, plain, descriptive).

Roman Wearing Apparel and Ornaments.

These slides show various coiffeures, togas, tunics, petasus, stolas, foot wear, beards, etc., worn by the Romans. (50, plain, descriptive notes).

Soap and Water, A Tale of.

This set of slides emphasizes cleanliness and sanitation. The historical progress of cleanliness is very well shown in this set of slides. From the "Old Stone Age" to the modern bathtub with interesting views of Roman baths and other types of bathing. (42, colored, descriptive notes).

Soil Erosion, A National Menace.

A very complete set of slides showing the damage to farm and grazing lands caused by unrestrained erosion. Also illustrates means of control and protection with terraces, trees, and grass. Types of dams and obstructions. (95, partly colored, descriptive notes).

Soil Productive, Make the.

This set is not a technical treatment of the soil. Its purpose is to encourage the practice of diversified farming and the growing of live stock as means to

the end of maintaining the fertility of the soil. Many helpful suggestions are offered. (59, partly colored, descriptive notes).

Swine Project in Vocational Agriculture, The.

This set of slides illustrates the important jobs which may be performed by students of agriculture in the development of skill and competency in the management of a swine enterprise. Treats the problem from the selection of the breed gilt to the swine show. (29, partly colored, descriptive slides).

Tuberculosis from Live Stock and Poultry, Eradication of.

These slides illustrate the importance of eradicating disease both as an economic and a public health problem. Prepared by the U. S. Department of Agriculture in cooperation with the Tuberculosis Eradication Division, Bureau of Animal Industry. (58, plain, descriptive notes).

Virgil.

This set of slides illustrates the Æneid. (51, plain, descriptive notes).

Washington, Seeing.

This set is a very fine collection of photographs descriptive of Washington, D. C. Shows map of Washington; Senate Office Building; Library of Congress; Treasury Building; White House; etc. (55, colored, descriptive notes).

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